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PTC/SB08A(10-01) Approved for use through 10/31/2002, OMB 851-0031 it & Trademeth Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)	Complete if Known		
	Application Number	Unknown	
	Filing Date	Even Date Herewith	
	First Named Inventor	Noble Jr., Wendell	
	Group Art Unit	BOKKERA 2822	
	Examiner Name	BELLEN K. DUONG	
Sheet 1 of 8	Attorney Docket No: 3	303.412US4	

Number		US PATENT DOCUMENTS					
US-4,252,579   02/24/1981   Ho, I. T., et al.   148   174   05/07/1979			Publication Date		Class	Subclass	Filing Date If Appropriate
US-4,604,162 08/05/1986 Sobczak, Zbigniew P. 156 657 12/23/1985 US-4,663,831 05/12/1987 Birrittella, Mark S., et al. 29 576 E 10/08/1985 US-4,663,962 06/16/1987 Chatterjee, P. K., et al. 357 23.6 03/21/1985 US-4,766,569 08/23/1988 Turner, J. E., et al. 365 201 03/04/1985 US-4,766,569 08/23/1988 Turner, J. E., et al. 365 185 06/05/1986 US-4,920,065 04/24/1990 Chin, Daeje, et al. 437 52 10/27/1989 US-4,920,389 04/24/1990 Itoh, Massahiro 357 23.6 03/07/1989 US-4,929,988 05/29/1990 Yoshikawa, K. 357 23.5 08/23/1988 US-4,987,089 01/22/1991 Roberts, 437 34 07/23/1990 US-4,987,089 01/22/1991 Roberts, 437 34 07/23/1990 US-5,001,526 03/19/1991 Gotou, Hiroshi 357 23.6 11/07/1988 US-5,021,355 06/04/1991 Dhong, et al. 437 40 04/21/1989 US-5,021,355 06/04/1991 Dhong, et al. 437 40 04/21/1989 US-5,028,977 07/02/1991 Kenneth, et al. 437 40 06/19/1991 US-5,028,977 07/02/1991 Gotou, H. 357 49 05/30/1989 US-5,028,977 07/02/1993 Hatsuo, N., et al. 257 299 07/17/1991 US-5,102,817 04/07/1992 Chatterjee, P. K., et al. 437 52 12/21/1992 US-5,330,800 06/15/1993 Itoh, Massahiro 365 189.01 07/31/1991 US-5,23,081 06/29/1993 Doan, 156 628 07/03/1993 US-5,332,880 06/14/1994 Sandhu, G. S., et al. 427 578 11/18/1993 US-5,332,	KBD	US-4,051,354	09/27/1977	Choate, W. C.	235	312	07/03/1975
US-4,663,831 05/12/1987 Birrittella, Mark S., et al. 29 576 E 10/08/1985 US-4,673,962 06/16/1987 Chatterjee, P. K., et al. 357 23.6 03/21/1985 US-4,761,768 08/02/1988 Turner, J. E., et al. 365 201 03/04/1985 US-4,766,569 08/23/1988 Turner, J. E., et al. 365 185 06/05/1986 US-4,920,065 04/24/1990 Chin, Daeje, et al. 437 52 10/27/1989 US-4,920,389 04/24/1990 Yoshikawa, K. 357 23.6 03/07/1989 US-4,929,988 05/29/1990 Yoshikawa, K. 357 23.5 08/23/1988 US-4,929,988 05/29/1990 Yoshikawa, K. 357 23.5 08/23/1988 US-4,987,089 01/22/1991 Roberts, 437 34 07/08/1998 US-4,987,089 01/22/1991 Roberts, 437 34 07/08/1998 US-5,01,526 03/19/1991 Roberts, 437 34 07/23/1990 US-5,01,526 03/19/1991 Nishimura, et al. 437 40 04/21/1989 US-5,01,526 05/21/1991 Nishimura, et al. 437 40 04/21/1989 US-5,021,355 06/04/1991 Dhong., et al. 437 35 05/18/1990 US-5,028,977 07/02/1991 Kenneth., et al. 357 43 06/16/1998 US-5,028,977 07/02/1991 Kenneth., et al. 357 43 06/16/1998 US-5,028,977 07/02/1991 Chatterjee, P. K., et al. 437 47 11/26/1990 US-5,181,089 01/19/1993 Matsuo, N., et al. 257 299 07/17/1991 US-5,216,266 06/01/1993 US-5,220,530 06/15/1993 Iboh, Masahiro 365 189.01 07/31/1991 US-5,230,880 06/14/1994 Sandhu, G. S., et al. 427 578 11/18/1993 US-5,320,880 06/14/1994 Sandhu, G. S., et al. 437 52 12/21/1992 US-5,336,3325 11/08/1994 Kerneth, F. et al. 365 149 07/01/1992 US-5,336,939 03/07/1994 Kerneth, J., et al. 437 52 04/02/1993 US-5,339,1911 02/21/1995 Beyer, K. D., et al. 365 149 07/01/1992 US-5,339,1911 02/21/1995 Beyer, K. D., et al. 437 52 09/24/1993 US-5,339,911 02/21/1995 Manning, Seper, K. D., et al. 437 52 04/22/1993 US-5,429,955 07/04/1995 Manning, Monte 257 306 08/12/1994 US-5,429,955 07/04/1995 Pein, Howard B. 365 185 06/17/1994 US-5,432,739 06/06/1995 Manning, Monte 257 67 02/22/1993 US-5		US-4,252,579	02/24/1981	Ho, I. T., et al.	148	174	05/07/1979
US-4,673,962 06/16/1987 Chatterjee, P. K., et al. 357 23.6 03/21/1985 US-4,761,768 08/02/1988 Turner, J. E., et al. 365 201 03/04/1985 US-4,766,569 08/23/1988 Turner, J. E., et al. 365 185 06/05/1986 US-4,920,065 04/24/1990 Chin, Daeje, et al. 437 52 10/27/1989 US-4,920,389 04/24/1990 Itoh, Massahiro 357 23.6 03/07/1989 US-4,929,988 05/29/1990 Yoshikawa, K. 357 23.5 08/23/1988 US-4,929,988 05/29/1991 Yoshikawa, K. 357 23.5 08/23/1988 US-4,985,318 09/18/1990 Harari, Eliyahou 365 149 07/08/1989 US-4,987,089 01/22/1991 Roberts, 437 34 07/23/1990 US-5,001,526 03/19/1991 Gotou, Hiroshi 357 23.6 11/07/1988 US-5,017,504 05/21/1991 Nishimura, et al. 437 40 04/21/1989 US-5,021,355 06/04/1991 Dhong, et al. 437 35 05/18/1990 US-5,028,977 07/02/1991 Kenneth, et al. 357 43 06/16/1989 US-5,057,896 10/01/1991 Gotou, H. 357 49 05/30/1999 US-5,057,896 10/01/1991 Gotou, H. 357 49 05/30/1999 US-5,102,817 04/07/1992 Chatterjee, P. K., et al. 437 47 11/26/1990 US-5,102,817 04/07/1993 Matsuo, N., et al. 257 299 07/17/1991 US-5,216,266 06/01/1993 Ozaki, Hiroji 257 302 04/09/1991 US-5,220,530 06/15/1993 Itoh, Massahiro 365 189.01 07/31/1991 US-5,220,530 06/15/1993 Tuan, H., et al. 437 52 12/21/1992 US-5,320,880 06/14/1994 Sandhu, G. S., et al. 427 578 11/18/1993 US-5,320,880 06/14/1994 Sandhu, G. S., et al. 427 578 11/18/1993 US-5,320,380 06/14/1994 Sandhu, G. S., et al. 427 578 11/18/1993 US-5,320,380 06/14/1994 Sandhu, G. S., et al. 427 578 11/18/1993 US-5,327,380 07/05/1994 Kersh Ill, D. V., et al. 365 195 02/08/1991 US-5,332,337,304 07/05/1995 Huang, C. H., et al. 437 52 09/24/1992 US-5,339,791 02/21/1995 Beyer, K. D., et al. 257 306 08/12/1994 US-5,391,991 02/21/1995 Beyer, K. D., et al. 257 306 08/12/1994 US-5,342,499 06/06/1995 Manning, Monte 257 67 02/22/1993 US-5,422,499 06/06/1995 Manning, Monte 257 67 02/22/1993 US-5,422,499 06/06/1995 Huang, C. H., et al. 437 52 04/22/1994 US-5,422,499 06/06/1995 Pien, Howard B. 365 185 06/17/1994 US-5,432,739 07/04/1995 Pien, Howard B. 365 185 06/17/1994		US-4,604,162	08/05/1986	Sobczak, Zbigniew P.	156	657	12/23/1985
US-4,761,768 08/02/1988 Turner, J. E., et al. 365 201 03/04/1985 US-4,766,569 08/23/1988 Turner, J. E., et al. 365 185 06/05/1986 US-4,920,065 04/24/1990 Chin, Daeje, et al. 437 52 10/27/1989 US-4,920,389 04/24/1990 Itoh, Massahiro 357 23.6 03/07/1989 US-4,929,988 05/29/1990 Yoshikawa, K. 357 23.5 08/23/1988 US-4,958,318 09/18/1990 Harari, Eliyahou 365 149 07/08/1988 US-4,987,089 01/22/1991 Roberts, Roberts, US-5,01,526 03/07/1991 Gotou, Hiroshi 357 23.6 11/07/1989 US-5,01,526 03/19/1991 Gotou, Hiroshi 357 23.6 11/07/1989 US-5,01,526 03/19/1991 Nishimura, et al. 437 40 04/21/1989 US-5,021,355 06/04/1991 Dhong, et al. 437 40 04/21/1989 US-5,021,355 06/04/1991 Kenneth, et al. 357 43 06/16/1989 US-5,028,977 07/02/1991 Kenneth, et al. 357 49 05/30/1989 US-5,028,977 07/02/1991 Kenneth, et al. 357 49 05/30/1989 US-5,102,817 04/07/1992 Chatterjee, P. K., et al. 437 47 11/26/1990 US-5,102,817 04/07/1992 Chatterjee, P. K., et al. 437 47 11/26/1990 US-5,216,266 06/01/1993 Ozaki, Hiroji 257 302 04/09/1991 US-5,220,530 06/15/1993 Itoh, Masahiro 365 189.01 07/31/1991 US-5,223,081 06/29/1993 Doan, 156 628 07/03/1991 US-5,223,081 06/29/1993 Doan, 156 628 07/03/1991 US-5,320,880 06/14/1994 Sandhu, G. S., et al. 437 52 12/21/1992 US-5,320,880 06/14/1994 Sandhu, G. S., et al. 437 52 12/21/1992 US-5,323,380 07/05/1994 Kersh III, D. V., et al. 365 195 02/08/1991 US-5,323,380 07/05/1994 Kim, J. S., et al. 437 52 09/28/1992 US-5,339,794 02/28/1995 Huang, C. H., et al. 437 52 09/24/1992 US-5,393,704 02/28/1995 Huang, C. H., et al. 437 203 12/13/1993 US-5,393,704 02/28/1995 Huang, C. H., et al. 437 26 04/22/1994 US-5,442,899 06/06/1995 Manning, Monte 257 36 06/17/1994 US-5,442,899 06/06/1995 Manning, Monte 257 36 07/02/21/1995 US-5,432,739 07/01/11/1995 Pein, Howard B. 437 52 04/02/1993 US-5,432,739 07/01/11/1995 Pein, Howard B. 365 185 06/17/1994 US-5,438,009 08/01/1995 Yang, M. T., et al. 437 52 04/02/1993		US-4,663,831	05/12/1987	Birrittella, Mark S., et al.	29	576 E	10/08/1985
US-4,766,569 08/23/1988 Turner, J. E., et al. 365 185 06/05/1986 US-4,920,065 04/24/1990 Chin, Daeje, et al. 437 52 10/27/1989 US-4,920,389 04/24/1990 Itoh, Massahiro 357 23.6 03/07/1989 US-4,929,988 05/29/1990 Yoshikawa, K. 357 23.5 08/23/1988 US-4,958,318 09/18/1990 Harari, Eliyahou 365 149 07/08/1988 US-4,987,089 01/22/1991 Roberts, 437 34 07/23/1990 US-5,001,526 03/19/1991 Gotou, Hiroshi 357 23.6 11/07/1988 US-5,017,504 05/21/1991 Nishimura, et al. 437 40 04/21/1989 US-5,021,355 06/04/1991 Dhong, et al. 437 35 05/18/1990 US-5,021,355 06/04/1991 Dhong, et al. 437 35 05/18/1990 US-5,028,977 07/02/1991 Kenneth, et al. 357 43 06/16/1989 US-5,028,977 07/02/1991 Chatterjee, P. K., et al. 357 49 05/30/1989 US-5,102,817 04/07/1992 Chatterjee, P. K., et al. 437 47 11/26/1990 US-5,181,089 01/19/1993 Matsuo, N., et al. 257 299 07/17/1991 US-5,216,266 06/01/1993 Ozaki, Hiroji 257 302 04/09/1991 US-5,220,530 06/15/1993 Itoh, Masahiro 365 189.01 07/31/1991 US-5,220,530 06/15/1993 Doan, 156 628 07/03/1991 US-5,220,530 06/15/1993 Tuan, H., et al. 437 52 12/21/1992 US-5,320,880 06/14/1994 Sandhu, G. S., et al. 427 578 11/18/1993 US-5,327,380 07/05/1994 Kersh III, D. V., et al. 365 149 07/01/1992 US-5,337,357 11/08/1994 Sunouchi, K., et al. 365 174 06/16/1992 US-5,337,357 12/27/1994 Kim, J. S., et al. 437 52 09/24/1992 US-5,339,794 02/28/1995 Manning, 365 200 08/13/1993 US-5,339,794 02/28/1995 Manning, 365 200 08/13/1993 US-5,339,794 02/28/1995 Huang, C. H., et al. 257 30 00 08/13/1993 US-5,424,289 06/06/1995 Manning, 365 200 08/13/1993 US-5,410,169 04/22/1995 Manning, 365 200 08/13/1993 US-5,422,499 06/06/1995 Manning, Monte 257 67 02/22/1993 US-5,422,499 06/06/1995 Manning, Monte 257 67 02/22/1993 US-5,432,739 07/01/11/1995 Pein, Howard B. 365 185 04/02/1993 US-5,433,009 08/01/1995 Yang, M. T., et al. 437 52 04/02/1993		US-4,673,962	06/16/1987	Chatterjee, P. K., et al.	357	23.6	03/21/1985
US-4,920,065 04/24/1990 Chin, Daeje , et al. 437 52 10/27/1989 US-4,920,389 04/24/1990 Itoh, Massahiro 357 23.6 03/07/1989 US-4,929,988 05/29/1990 Yoshikawa, K. 357 23.5 08/23/1988 US-4,987,089 01/22/1991 Roberts, 437 34 07/23/1990 US-4,987,089 01/22/1991 Roberts, 437 34 07/23/1990 US-5,001,526 03/19/1991 Gotou, Hiroshi 357 23.6 11/07/1988 US-5,017,504 05/21/1991 Nishimura , et al. 437 40 04/21/1989 US-5,017,504 05/21/1991 Dhong , et al. 437 35 05/18/1990 US-5,028,977 07/02/1991 Kenneth , et al. 357 43 06/16/1989 US-5,057,896 10/01/1991 Gotou, H. 357 49 05/30/1989 US-5,057,896 10/01/1991 Gotou, H. 357 49 05/30/1989 US-5,102,817 04/07/1992 Chatterjee, P. K., et al. 437 47 11/26/1990 US-5,102,817 04/07/1992 Chatterjee, P. K., et al. 437 47 11/26/1990 US-5,181,089 01/19/1993 Matsuo, N. , et al. 257 299 07/17/1991 US-5,216,266 06/01/1993 Ozaki, Hiroji 257 302 04/09/1991 US-5,223,081 06/29/1993 Doan, 156 628 07/03/1991 US-5,223,081 06/29/1993 Doan, 156 628 07/03/1991 US-5,223,081 06/29/1993 Doan, 156 628 07/03/1991 US-5,230,880 06/14/1994 Sandhu, G. S., et al. 427 578 11/18/1993 US-5,365,477 11/15/1994 Kersh Ill, D. V., et al. 365 149 07/01/1992 US-5,365,477 11/15/1994 Kirn, J. S., et al. 437 52 09/24/1992 US-5,393,191 02/27/1994 Kirn, J. S., et al. 437 52 09/24/1992 US-5,393,191 02/27/1994 Kirn, J. S., et al. 437 52 09/24/1992 US-5,393,191 02/27/1994 Kirn, J. S., et al. 437 52 09/24/1992 US-5,393,704 02/28/1995 Huang, C. H., et al. 437 203 12/13/1993 US-5,393,704 02/28/1995 Huang, C. H., et al. 437 203 12/13/1993 US-5,410,169 04/25/1995 Huang, C. H., et al. 437 203 12/13/1993 US-5,422,499 06/06/1995 Manning, Monte 257 67 02/22/1993 US-5,422,499 06/06/1995 Manning, Monte 257 67 02/22/1993 US-5,422,499 06/06/1995 Manning, Monte 257 67 02/22/1993 US-5,423,955 07/04/1995 Pein, Howard B. 365 185 06/17/1994 US-5,438,009 08/01/1995 Yang, M. T., et al. 437 52 04/02/1993		US-4,761,768	08/02/1988	Turner, J. E., et al.	365	201	03/04/1985
US-4,920,389         04/24/1990         Itoh, Massahiro         357         23.6         03/07/1989           US-4,929,988         05/29/1990         Yoshikawa, K.         357         23.5         08/23/1988           US-4,958,318         09/18/1990         Harari, Eliyahou         365         149         07/08/1988           US-4,987,089         01/22/1991         Roberts,         437         34         07/23/1990           US-5,001,526         03/19/1991         Gotou, Hiroshi         357         23.6         11/07/1988           US-5,017,504         05/21/1991         Nishimura, et al.         437         40         04/21/1989           US-5,021,355         06/04/1991         Dhong, et al.         437         35         05/18/1990           US-5,028,977         07/02/1991         Kenneth, et al.         357         43         06/16/1989           US-5,028,817         04/07/1992         Chatterjee, P. K., et al.         437         47         11/26/1990           US-5,102,817         04/07/1993         Matsuo, N., et al.         257         299         07/17/1991           US-5,216,266         06/01/1993         Ozaki, Hiroji         257         302         04/09/1991           US-5,220,530         06/15/1993 <td></td> <td>US-4,766,569</td> <td>08/23/1988</td> <td>Turner, J. E., et al.</td> <td>365</td> <td></td> <td>06/05/1986</td>		US-4,766,569	08/23/1988	Turner, J. E., et al.	365		06/05/1986
US-4,929,988 05/29/1990 Yoshikawa, K. 357 23.5 08/23/1988 US-4,958,318 09/18/1990 Harari, Eliyahou 365 149 07/08/1988 US-4,987,089 01/22/1991 Roberts, 437 34 07/23/1990 US-5,001,526 03/19/1991 Sotou, Hiroshi 357 23.6 11/07/1988 US-5,001,526 03/19/1991 Nishimura, , et al. 437 40 04/21/1989 US-5,021,355 06/04/1991 Dhong, , et al. 437 35 05/18/1990 US-5,028,977 07/02/1991 Kenneth, , et al. 357 43 06/16/1989 US-5,057,896 10/01/1991 Gotou, H. 357 49 05/30/1989 US-5,102,817 04/07/1992 Chatterjee, P. K., et al. 437 47 11/26/1990 US-5,181,089 01/19/1993 Matsuo, N. , et al. 257 299 07/17/1991 US-5,220,530 06/15/1993 Itoh, Masahiro 365 189.01 07/31/1991 US-5,223,081 06/29/1993 Doan, 156 628 07/03/1991 US-5,223,081 06/29/1993 Tuan, H., et al. 437 52 12/21/1992 US-5,332,380 06/14/1994 Sandhu, G. S., et al. 427 578 11/18/1993 US-5,365,477 11/15/1994 Kersh III, D. V., et al. 365 149 07/01/1993 US-5,365,477 11/15/1994 Kirm, J. S., et al. 365 149 07/01/1993 US-5,393,704 02/21/1995 Manning, 365 200 08/13/1993 US-5,393,704 02/28/1995 Huang, C. H., et al. 437 52 09/24/1992 US-5,393,704 02/28/1995 Yamamoto, T., et al. 257 306 08/12/1994 US-5,422,499 06/06/1995 Manning, 365 200 08/13/1993 US-5,422,499 06/06/1995 Manning, 365 200 08/13/1993 US-5,422,499 06/06/1995 Manning, 365 257 316 04/25/1994 US-5,422,499 06/06/1995 Manning, 365 260 08/13/1993 US-5,422,499 06/06/1995 Manning, 365 260 08/13/1993 US-5,422,499 06/06/1995 Manning, 365 257 316 04/25/1994 US-5,422,499 06/06/1995 Manning, 365 185 06/17/1994 US-5,422,499 06/06/1995 Manning, Monte 257 67 02/22/1993 US-5,423,739 07/11/1/1995 Pein, Howard B. 365 185 06/17/1994 US-5,438,009 08/01/1995 Pein, Howard		US-4,920,065	04/24/1990	Chin, Daeje, et al.	437	52	10/27/1989
US-4,958,318         09/18/1990         Harari, Eliyahou         365         149         07/08/1988           US-4,987,089         01/22/1991         Roberts,         437         34         07/23/1990           US-5,001,526         03/19/1991         Gotou, Hiroshi         357         23.6         11/07/1988           US-5,017,504         05/21/1991         Nishimura, et al.         437         40         04/21/1989           US-5,021,355         06/04/1991         Dhong, et al.         437         35         05/18/1990           US-5,028,977         07/02/1991         Kenneth, et al.         357         43         06/16/1989           US-5,028,977         07/02/1991         Gotou, H.         357         49         05/30/1989           US-5,102,817         04/07/1992         Chatterjee, P. K., et al.         437         47         11/26/1990           US-5,181,089         01/19/1993         Matsuo, N., et al.         257         299         07/17/1991           US-5,216,266         06/01/1993         Ozaki, Hiroji         257         302         04/09/1991           US-5,223,081         06/29/1993         Doan,         156         628         07/03/1991           US-5,320,880         06/14/1994         Sa		US-4,920,389	04/24/1990	Itoh, Massahiro	357	23.6	03/07/1989
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US-5,021,355 06/04/1991 Dhong, , et al. 437 35 05/18/1990 US-5,028,977 07/02/1991 Kenneth, , et al. 357 43 06/16/1989 US-5,057,896 10/01/1991 Gotou, H. 357 49 05/30/1989 US-5,102,817 04/07/1992 Chatterjee, P. K., et al. 437 47 11/26/1990 US-5,181,089 01/19/1993 Matsuo, N. , et al. 257 299 07/17/1991 US-5,216,266 06/01/1993 Ozaki, Hiroji 257 302 04/09/1991 US-5,220,530 06/15/1993 Itoh, Masahiro 365 189.01 07/31/1991 US-5,223,081 06/29/1993 Doan, 156 628 07/03/1991 US-5,230,880 06/14/1994 Sandhu, G. S., et al. 427 578 11/18/1993 US-5,327,380 07/05/1994 Kersh III, D. V., et al. 365 195 02/08/1991 US-5,363,325 11/08/1994 Sunouchi, K, et al. 365 149 07/01/1992 US-5,365,477 11/15/1994 Cooper Jr., J A., et al. 365 174 06/16/1992 US-5,391,911 02/21/1995 Beyer, K. D., et al. 257 522 04/22/1994 US-5,393,704 02/28/1995 Huang, C. H., et al. 437 203 12/13/1993 US-5,429,955 07/04/1995 Hong, G. 257 306 08/12/1994 US-5,429,955 07/04/1995 Hong, G. 257 316 04/25/1994 US-5,429,955 07/04/1995 Manning, Monte 257 67 02/22/1993 US-5,429,955 07/04/1995 Pein, Howard B. 365 185 06/77/1994 US-5,429,955 07/04/1995 Pein, Howard B. 365 185 06/77/1994 US-5,438,009 08/01/1995 Yang, M. T., et al. 437 52 04/02/1993		US-5,017,504			437	40	04/21/1989
US-5,028,977 07/02/1991 Kenneth, , et al. 357 43 06/16/1989 US-5,057,896 10/01/1991 Gotou, H. 357 49 05/30/1989 US-5,102,817 04/07/1992 Chatterjee, P. K., et al. 437 47 11/26/1990 US-5,181,089 01/19/1993 Matsuo, N. , et al. 257 299 07/17/1991 US-5,216,266 06/01/1993 Ozaki, Hiroji 257 302 04/09/1991 US-5,220,530 06/15/1993 Itoh, Masahiro 365 189.01 07/31/1991 US-5,223,081 06/29/1993 Doan, 156 628 07/03/1991 US-5,223,081 06/29/1993 Tuan, H. , et al. 437 52 12/21/1992 US-5,320,880 06/14/1994 Sandhu, G. S., et al. 427 578 11/18/1993 US-5,327,380 07/05/1994 Kersh III, D. V., et al. 365 195 02/08/1991 US-5,363,325 11/08/1994 Sunouchi, K , et al. 365 149 07/01/1992 US-5,363,325 11/08/1994 Cooper Jr., J A., et al. 365 174 06/16/1992 US-5,365,477 11/15/1994 Cooper Jr., J A., et al. 437 52 09/24/1992 US-5,391,911 02/21/1995 Beyer, K. D., et al. 437 52 09/24/1992 US-5,391,911 02/21/1995 Manning, 365 200 08/13/1993 US-5,392,245 02/21/1995 Manning, 365 200 08/13/1993 US-5,393,704 02/28/1995 Huang, C. H., et al. 437 203 12/13/1993 US-5,414,287 05/09/1995 Hong, G. 257 316 04/25/1994 US-5,414,287 05/09/1995 Manning, Monte 257 67 02/22/1993 US-5,422,499 06/06/1995 Manning, Monte 257 67 02/22/1993 US-5,432,739 07/11/1995 Pein, Howard B. 365 185 06/17/1994 US-5,438,009 08/01/1995 Yang, M. T., et al. 437 52 04/02/1993				Dhong, , et al.	437	35	05/18/1990
US-5,057,896 10/01/1991 Gotou, H. 357 49 05/30/1989 US-5,102,817 04/07/1992 Chatterjee, P. K., et al. 437 47 11/26/1990 US-5,181,089 01/19/1993 Matsuo, N., et al. 257 299 07/17/1991 US-5,216,266 06/01/1993 Ozaki, Hiroji 257 302 04/09/1991 US-5,220,530 06/15/1993 Itoh, Masahiro 365 189.01 07/31/1991 US-5,223,081 06/29/1993 Doan, 156 628 07/03/1991 US-5,223,081 06/29/1993 Tuan, H., et al. 437 52 12/21/1992 US-5,320,880 06/14/1994 Sandhu, G. S., et al. 427 578 11/18/1993 US-5,327,380 07/05/1994 Kersh III, D. V., et al. 365 195 02/08/1991 US-5,363,325 11/08/1994 Sunouchi, K, et al. 365 195 02/08/1991 US-5,365,477 11/15/1994 Cooper Jr., J A., et al. 365 174 06/16/1992 US-5,391,911 02/21/1995 Beyer, K. D., et al. 437 52 09/24/1992 US-5,393,704 02/28/1995 Huang, C. H., et al. 437 203 12/13/1993 US-5,393,704 02/28/1995 Huang, C. H., et al. 437 203 12/13/1993 US-5,396,093 03/07/1995 Yamamoto, T., et al. 257 306 08/12/1994 US-5,414,287 05/09/1995 Manning, G. 257 316 04/25/1994 US-5,422,499 06/06/1995 Manning, Monte 257 67 02/22/1993 US-5,422,499 06/06/1995 Manning, Monte 257 67 02/22/1993 US-5,432,739 07/11/1995 Pein, Howard B. 365 185 06/17/1994 US-5,438,009 08/01/1995 Yang, M. T., et al. 437 52 04/02/1993		US-5,028,977	07/02/1991		357	43	06/16/1989
US-5,102,817 04/07/1992 Chatterjee, P. K., et al. 437 47 11/26/1990 US-5,181,089 01/19/1993 Matsuo, N., et al. 257 299 07/17/1991 US-5,216,266 06/01/1993 Ozaki, Hiroji 257 302 04/09/1991 US-5,220,530 06/15/1993 Itoh, Masahiro 365 189.01 07/31/1991 US-5,223,081 06/29/1993 Doan, 156 628 07/03/1991 US-5,266,514 11/30/1993 Tuan, H., et al. 437 52 12/21/1992 US-5,320,880 06/14/1994 Sandhu, G. S., et al. 427 578 11/18/1993 US-5,327,380 07/05/1994 Kersh III, D. V., et al. 365 195 02/08/1991 US-5,363,325 11/08/1994 Sunouchi, K., et al. 365 149 07/01/1992 US-5,365,477 11/15/1994 Cooper Jr., J A., et al. 365 174 06/16/1992 US-5,391,911 02/21/1995 Beyer, K. D., et al. 437 52 09/24/1992 US-5,392,245 02/21/1995 Manning, 365 200 08/13/1993 US-5,393,704 02/28/1995 Huang, C. H., et al. 437 203 12/13/1993 US-5,396,093 03/07/1995 Lu, 257 306 08/12/1994 US-5,414,287 05/09/1995 Hong, G. 257 316 04/25/1994 US-5,422,499 06/06/1995 Manning, Monte 257 67 02/22/1993 US-5,422,499 06/06/1995 Manning, Monte 257 67 02/22/1993 US-5,422,499 06/06/1995 Manning, Monte 257 67 02/22/1993 US-5,432,739 07/11/1995 Pein, Howard B. 365 185 06/17/1994 US-5,438,009 08/01/1995 Yang, M. T., et al. 437 52 04/02/1993		US-5,057,896	10/01/1991		357	49	05/30/1989
US-5,181,089         01/19/1993         Matsuo, N., et al.         257         299         07/17/1991           US-5,216,266         06/01/1993         Ozaki, Hiroji         257         302         04/09/1991           US-5,220,530         06/15/1993         Itoh, Masahiro         365         189.01         07/31/1991           US-5,223,081         06/29/1993         Doan,         156         628         07/03/1991           US-5,266,514         11/30/1993         Tuan, H., et al.         437         52         12/21/1992           US-5,320,880         06/14/1994         Sandhu, G. S., et al.         427         578         11/18/1993           US-5,327,380         07/05/1994         Kersh III, D. V., et al.         365         195         02/08/1991           US-5,363,325         11/08/1994         Sunouchi, K, et al.         365         149         07/01/1992           US-5,365,477         11/15/1994         Cooper Jr., J A., et al.         365         149         07/01/1992           US-5,391,911         02/21/1995         Beyer, K. D., et al.         257         522         04/22/1994           US-5,392,245         02/21/1995         Manning,         365         200         08/13/1993           US-5,396,093		US-5,102,817	04/07/1992		437	47	11/26/1990
US-5,220,530         06/15/1993         Itoh, Masahiro         365         189.01         07/31/1991           US-5,223,081         06/29/1993         Doan,         156         628         07/03/1991           US-5,266,514         11/30/1993         Tuan, H., et al.         437         52         12/21/1992           US-5,320,880         06/14/1994         Sandhu, G. S., et al.         427         578         11/18/1993           US-5,327,380         07/05/1994         Kersh III, D. V., et al.         365         195         02/08/1991           US-5,363,325         11/08/1994         Sunouchi, K, et al.         365         149         07/01/1992           US-5,365,477         11/15/1994         Cooper Jr., J A., et al.         365         174         06/16/1992           US-5,376,575         12/27/1994         Kim, J. S., et al.         437         52         09/24/1992           US-5,391,911         02/21/1995         Beyer, K. D., et al.         257         522         04/22/1994           US-5,393,704         02/28/1995         Huang, C. H., et al.         437         203         12/13/1993           US-5,410,169         04/25/1995         Yamamoto, T., et al.         257         306         08/12/1994           US-5,4		US-5,181,089	01/19/1993	Matsuo, N., et al.	257	299	07/17/1991
US-5,223,081 06/29/1993 Doan, 156 628 07/03/1991 US-5,266,514 11/30/1993 Tuan, H., et al. 437 52 12/21/1992 US-5,320,880 06/14/1994 Sandhu, G. S., et al. 427 578 11/18/1993 US-5,327,380 07/05/1994 Kersh III, D. V., et al. 365 195 02/08/1991 US-5,363,325 11/08/1994 Sunouchi, K, et al. 365 149 07/01/1992 US-5,365,477 11/15/1994 Cooper Jr., J A., et al. 365 174 06/16/1992 US-5,376,575 12/27/1994 Kim, J. S., et al. 437 52 09/24/1992 US-5,391,911 02/21/1995 Beyer, K. D., et al. 257 522 04/22/1994 US-5,392,245 02/21/1995 Manning, 365 200 08/13/1993 US-5,393,704 02/28/1995 Huang, C. H., et al. 437 203 12/13/1993 US-5,410,169 04/25/1995 Yamamoto, T., et al. 257 306 08/12/1994 US-5,410,169 04/25/1995 Hong, G. 257 316 04/25/1994 US-5,422,499 06/06/1995 Manning, Monte 257 67 02/22/1993 US-5,422,499 06/06/1995 Manning, Monte 257 67 02/22/1993 US-5,429,955 07/04/1995 Joyner, K. A., et al. 437 26 10/26/1992 US-5,438,009 08/01/1995 Yang, M. T., et al. 437 52 04/02/1993		US-5,216,266	06/01/1993		257		
US-5,223,081         06/29/1993         Doan,         156         628         07/03/1991           US-5,266,514         11/30/1993         Tuan, H., et al.         437         52         12/21/1992           US-5,320,880         06/14/1994         Sandhu, G. S., et al.         427         578         11/18/1993           US-5,327,380         07/05/1994         Kersh III, D. V., et al.         365         195         02/08/1991           US-5,363,325         11/08/1994         Sunouchi, K, et al.         365         149         07/01/1992           US-5,365,477         11/15/1994         Cooper Jr., J A., et al.         365         174         06/16/1992           US-5,376,575         12/27/1994         Kim, J. S., et al.         437         52         09/24/1992           US-5,391,911         02/21/1995         Beyer, K. D., et al.         257         522         04/22/1994           US-5,392,245         02/21/1995         Manning,         365         200         08/13/1993           US-5,396,093         03/07/1995         Lu,         257         306         08/12/1994           US-5,410,169         04/25/1995         Yamamoto, T., et al.         257         316         04/25/1994           US-5,422,499         06		US-5,220,530	06/15/1993	Itoh, Masahiro	365	189.01	07/31/1991
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US-5,327,380       07/05/1994       Kersh III, D. V., et al.       365       195       02/08/1991         US-5,363,325       11/08/1994       Sunouchi, K, et al.       365       149       07/01/1992         US-5,365,477       11/15/1994       Cooper Jr., J A., et al.       365       174       06/16/1992         US-5,376,575       12/27/1994       Kim, J. S., et al.       437       52       09/24/1992         US-5,391,911       02/21/1995       Beyer, K. D., et al.       257       522       04/22/1994         US-5,392,245       02/21/1995       Manning,       365       200       08/13/1993         US-5,393,704       02/28/1995       Huang, C. H., et al.       437       203       12/13/1993         US-5,396,093       03/07/1995       Lu,       257       306       08/12/1994         US-5,410,169       04/25/1995       Yamamoto, T., et al.       257       316       04/25/1994         US-5,422,499       06/06/1995       Manning, Monte       257       67       02/22/1993         US-5,429,955       07/04/1995       Joyner, K. A., et al.       437       26       10/26/1992         US-5,432,739       07/11/1995       Pein, Howard B.       365       185       06/17/1994     <		US-5,320,880	06/14/1994				11/18/1993
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US-5,376,575 12/27/1994 Kim, J. S., et al. 437 52 09/24/1992 US-5,391,911 02/21/1995 Beyer, K. D., et al. 257 522 04/22/1994 US-5,392,245 02/21/1995 Manning, 365 200 08/13/1993 US-5,393,704 02/28/1995 Huang, C. H., et al. 437 203 12/13/1993 US-5,396,093 03/07/1995 Lu, 257 306 08/12/1994 US-5,410,169 04/25/1995 Yamamoto, T., et al. 257 301 02/22/1993 US-5,414,287 05/09/1995 Hong, G. 257 316 04/25/1994 US-5,422,499 06/06/1995 Manning, Monte 257 67 02/22/1993 US-5,429,955 07/04/1995 Joyner, K. A., et al. 437 26 10/26/1992 US-5,432,739 07/11/1995 Pein, Howard B. 365 185 06/17/1994 US-5,438,009 08/01/1995 Yang, M. T., et al. 437 52 04/02/1993		US-5,365,477	11/15/1994		365	174	06/16/1992
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US-5,393,704 02/28/1995 Huang, C. H., et al. 437 203 12/13/1993 US-5,396,093 03/07/1995 Lu, 257 306 08/12/1994 US-5,410,169 04/25/1995 Yamamoto, T., et al. 257 301 02/22/1993 US-5,414,287 05/09/1995 Hong, G. 257 316 04/25/1994 US-5,422,499 06/06/1995 Manning, Monte 257 67 02/22/1993 US-5,429,955 07/04/1995 Joyner, K. A., et al. 437 26 10/26/1992 US-5,432,739 07/11/1995 Pein, Howard B. 365 185 06/17/1994 US-5,438,009 08/01/1995 Yang, M. T., et al. 437 52 04/02/1993		US-5,391,911	02/21/1995				04/22/1994
US-5,396,093 03/07/1995 Lu, 257 306 08/12/1994 US-5,410,169 04/25/1995 Yamamoto, T. , et al. 257 301 02/22/1993 US-5,414,287 05/09/1995 Hong, G. 257 316 04/25/1994 US-5,422,499 06/06/1995 Manning, Monte 257 67 02/22/1993 US-5,429,955 07/04/1995 Joyner, K. A., et al. 437 26 10/26/1992 US-5,432,739 07/11/1995 Pein, Howard B. 365 185 06/17/1994 US-5,438,009 08/01/1995 Yang, M. T., et al. 437 52 04/02/1993		US-5,392,245	02/21/1995	Manning,	365	200	08/13/1993
US-5,410,169 04/25/1995 Yamamoto, T. , et al. 257 301 02/22/1993 US-5,414,287 05/09/1995 Hong, G. 257 316 04/25/1994 US-5,422,499 06/06/1995 Manning, Monte 257 67 02/22/1993 US-5,429,955 07/04/1995 Joyner, K. A., et al. 437 26 10/26/1992 US-5,432,739 07/11/1995 Pein, Howard B. 365 185 06/17/1994 US-5,438,009 08/01/1995 Yang, M. T., et al. 437 52 04/02/1993		US-5,393,704	02/28/1995	Huang, C. H., et al.	437	203	12/13/1993
US-5,410,169     04/25/1995     Yamamoto, T., et al.     257     301     02/22/1993       US-5,414,287     05/09/1995     Hong, G.     257     316     04/25/1994       US-5,422,499     06/06/1995     Manning, Monte     257     67     02/22/1993       US-5,429,955     07/04/1995     Joyner, K. A., et al.     437     26     10/26/1992       US-5,432,739     07/11/1995     Pein, Howard B.     365     185     06/17/1994       US-5,438,009     08/01/1995     Yang, M. T., et al.     437     52     04/02/1993		US-5,396,093	03/07/1995	Lu,	257	306	08/12/1994
US-5,414,287 05/09/1995 Hong, G. 257 316 04/25/1994 US-5,422,499 06/06/1995 Manning, Monte 257 67 02/22/1993 US-5,429,955 07/04/1995 Joyner, K. A., et al. 437 26 10/26/1992 US-5,432,739 07/11/1995 Pein, Howard B. 365 185 06/17/1994 US-5,438,009 08/01/1995 Yang, M. T., et al. 437 52 04/02/1993		US-5,410,169	04/25/1995	Yamamoto, T., et al.			02/22/1993
US-5,422,499 06/06/1995 Manning, Monte 257 67 02/22/1993 US-5,429,955 07/04/1995 Joyner, K. A., et al. 437 26 10/26/1992 US-5,432,739 07/11/1995 Pein, Howard B. 365 185 06/17/1994 US-5,438,009 08/01/1995 Yang, M. T., et al. 437 52 04/02/1993		US-5,414,287	05/09/1995		257	316	04/25/1994
US-5,432,739 07/11/1995 Pein, Howard B. 365 185 06/17/1994 US-5,438,009 08/01/1995 Yang, M. T., et al. 437 52 04/02/1993		US-5,422,499	06/06/1995		257		02/22/1993
US-5,432,739         07/11/1995         Pein, Howard B.         365         185         06/17/1994           US-5,438,009         08/01/1995         Yang, M. T., et al.         437         52         04/02/1993		US-5,429,955	07/04/1995	Joyner, K. A., et al.	437	26	10/26/1992
		US-5,432,739	07/11/1995		365	185	06/17/1994
		US-5,438,009	08/01/1995	Yang, M. T., et al.	437	52	04/02/1993
<b>J/</b>   US-5,440,158   08/08/1995   Sung-Mu, H.   257   314   07/05/1994	/	US-5,440,158	08/08/1995	Sung-Mu, H.	257	314	07/05/1994
	V	US-5,445,986					09/01/1994

**EXAMINER** 

DATE CONSIDERED 6/20/2005

PTC/SB/08A(10-01)
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	First Named Inventor	Noble Jr., Wendell		
	Group Art Unit	Jakatewa -		
	Examiner Name			
Sheet 2 of 8	Attorney Docket No: 3	303.412US4		

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KBD	US-5,451,538	09/19/1995	Fitch; J.T., et al.	487	60	04/20/1994
	US-5,460,316	10/24/1995	Hefele, H. L.	228	39	09/15/1994
	US-5,460,988	10/24/1995	Hong, Gary	437	43	04/25/1994
	US-5,466,625	11/14/1995	Hsieh, C. M., et al.	437	52	11/22/1994
	US-5,483,094	01/09/1996	Sharma, U., et al.	257	316	09/26/1994
	US-5,483,487	01/09/1996	Sung-Mu, H.	365	185.33	04/24/1995
	US-5,492,853	02/20/1996	Jeng, , et al.	437	60	03/11/1994
	US-5,495,441	02/27/1996	Hong, G.	365	185.01	05/18/1994
	US-5,497,017	03/05/1996	Gonzales, F	257	306	01/26/1995
	US-5,528,173	06/18/1996	Merritt, Todd, et al.	326	80	05/10/1995
1	US-5,640,350	06/17/1997	Iga, A.	365	186	08/21/1996
	US-5,644,540	07/01/1997	Manning,	365	200	02/17/1995
	US-5,646,900	07/08/1997	Tsukude, Masaki , et al.	365	205	01/11/1996
	US-5,691,230	11/25/1997	Forbes, L.	437	62	09/04/1996
	US-5,696,011	12/09/1997	Yamazaki, S., et al.	437	40 TFI	03/23/1993
	US-5,705,415	01/06/1998	Orlowski, Marius K., et al.	437	43	10/04/1994
	US-5,714,793	02/03/1998	Cartagena, E., et al.	257	507	08/21/1996
	US-5,874,760	02/23/1999	Burns Jr., S. M., et al.	257	315	01/22/1997
	US-5,879,971	03/09/1999	Witek, K.	438	238	09/28/1995
·	US-5,909,400	06/01/1999	Bertin, C. L., et al.	365	187	08/22/1997
	US-5,909,618	06/01/1999	Forbes, L., et al.	438	242	07/08/1997
	US-5,914,511	06/22/1999	Noble, W. P., et al.	257	302	10/06/1997
	US-5,933,717	08/03/1999	Hause, Frederick N., et al.	438	200	03/04/1997
	US-5,943,267	08/24/1999	Sekariapuram, S., et al.	365	185.28	06/12/1998
	US-5,998,820	12/07/1999	Chi, M, et al.	257	296	11/24/1998
	US-6,016,268	01/18/2000	Worley, Eugene R.	365	149	02/05/1998
	US-6,172,391	01/09/2001	Goebel, Bernd	257	305	08/27/1998
	US-6,172,535	01/09/2001	Hopkins, M.	327	66	11/04/1999
	US-6,181,121	01/30/2001	Kirkland, , et al.			
	US-6,181,196	01/30/2001	Nguyen, B.	327	539	12/14/1998
	US-6,208,164	03/27/2001	Noble, W. P., et al.	326	41	08/04/1998
	US-6,221,788	04/24/2001	Kobayashi, H., et al.	438	762	12/18/1998
	US-6,238,976	05/29/2001	Noble, Wendell P., et al.	438	259	02/27/1998
	US-6,242,775	06/05/2001	Noble, Wendell P.	257	330	02/24/1998
1	US-6,255,708	07/03/2001	Sudharsanan, R., et al.	257	428	10/10/1997
Y	US-6,323,719	11/27/2001	Chang, C., et al.	327	478	05/08/2000

EXAMINER That They DATE CONSIDERED 4/20/2005

PTO/SB08A(10-01)
Approved for use through 10/31/2002, OMB 851-0031
US Patent & Trademark Office, U.S. DEPARTMENT OF CONSIGERCE

Substitute for form 1449A/PTO	Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid QMB control number			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)	Application Number	Unknown		
	Filing Date	Even Date Herewith		
	First Named Inventor	Noble Jr., Wendell		
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	Examiner Name	Julius .		
Sheet 3 of 8	Attorney Docket No: 3	303.412US4		

FOREIGN PATENT DOCUMENTS						
Examiner initials*	Foreign Document No	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	T²
KBD	JP-2000-164883	06/16/2000	Yamazaki, S., et al.	H01L	29/786	

	OTHER	R DOCUMENTS NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No <sup>1</sup>	include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
KED		ADLER, E., et al., "The Evolution of IBM CMOS DRAM Technology", <u>IBM</u> Journal of Research & Development, 39(1-2), (January-March 1995),167-188	
		ASAI, S., et al., "Technology Challenges for Integration Near and Below 0.1 micrometer", Proceedings of the IEEE, 85(4), Special Issue on Nanometer-Scale Science & Technology, (Apr. 1997),505-520	
		BANERJEE, S. K., et al., "Characterization of Trench Transistors for 3-D Memories", 1986 Symposium on VLSI Technology, Digest of Technical Papers, San Diego, CA,(May 1986),79-80	
	,	BLALOCK, T. N., et al., "A High-Speed Sensing Scheme for 1T Dynamic RAM's Utilizing the Clamped Bit-Line Sense Amplifier", <u>IEEE Journal of Solid-State Circuits</u> , 27(4), (April 1992),pp. 618-624	
		BOMCHIL, G., et al., "Porous Silicon: The Material and its Applications in Silicon-On-Insulator Technologies", <u>Applied Surface Science</u> , 41/42, (1989),604-613	
		BURNETT, D., et al., "Implications of Fundamental Threshold Voltage Variations for High-Density SRAM and Logic Circuits", 1994 Symposium on VLSI Technology, Digest of Technical Papers, Honolulu, HI,(June 1994),15-16	
		BURNETT, D., et al., "Statistical Threshold-Voltage Variation and its Impact on Supply-Voltage Scaling", Proceedings SPIE: Microelectronic Device and Multilevel Interconnection Technology, 2636, (1995),83-90	
		CHEN, M., et al., "Back-Gate Forward Bias Method for Low Voltage CMOS Digital Cicuits", IEEE Transactions on Electron Devices, 43, (1996),904-909	
		CHEN, M. J., et al., "Back-Gate Forward Bias Method for Low-Voltage CMOS Digital Cicuits", <u>IEEE Transactions on Electron Devices</u> , 43, (June 1996),904-909	
		CHEN, M. J., et al., "Optimizing the Match in Weakly Inverted MOSFET's by Gated Lateral Bipolar Action", <u>IEEE Transactions on Electron Devices</u> , 43, (May 1996),766-773	
¥		CHUNG, I. Y., et al., "A New SOI Inverter for Low Power Applications", <u>Proceedings of the 1996 IEEE International SOI Conference,</u> Sanibel Island, FL,(1996),20-21	

EXAMINER John Prop DATE CONSIDERED 6/20/2005

PTO/SB/084 (10-01)
Approved for use through 10/31/2002 OMB 651-0031
US Present & Trademark Office: U.S. DEPARTMENT OF COMMERCE
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Substitute for form 1449APTO	Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid CMB control number.  Complete if Known			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)	Application Number	Unknown		
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	First Named Inventor	Noble Jr., Wendell		
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	Examiner Name	Elder Son		
Sheet 4 of 8	Attorney Docket No: 3	303.412US4		

IMATO	DE, VIVEK K., et al., "Random Mosfet Parameter Fluctuation Limits to Gigascale Integration (GST)", Symposium on VLSI Technology Digest of Technical Papers,	
MIK	(1996),198-199	
<del>                                     </del>	DENTON, J. P., et al., "Fully Depleted Dual-Gated Thin-Film SOI P-MOSFET's	
	Fabricated in SOI Islands with an Isolated Buried Polysilicon Backgate", IEEE	
	Electron Device Letters, 17(11), (November1996),pp. 509-511	
	FONG, Y., et al., "Oxides Grown on Textured Single-Crystal Silicon	
	Dependence on Process and Application in EEPROMs", <u>IEEE Transactions on</u>	
	Electron Devices, 37(3), (March 1990),pp. 583-590	
	FUSE, T., et al., "A 0.5V 200MHz 1-Stage 32b ALU Using a Body Bias	
	Controlled SOI Pass-Gate Logic", 1997 IEEE International Solid-State Circuits	
	Conference, Digest of Technical Papers, (1997),286-287	
	GONG, S., et al., "Techniques for Reducing Switching Noise in High Speed	
	Digital Systems", Proceedings of the 8th Annual IEEE International ASIC	
	Conference and Exhibit, Austin, TX,(1995),21-24	
	HAO, M. Y., et al., "Electrical Characteristics of Oxynitrides Grown on Textured	
ļ ·	Single-Crystal Silicon", Appl. Phys. Lett., 60, (Jan. 1992),445-447	
	HARADA, M., et al., "Suppression of Threshold Voltage Variation in	
	MTCMOS/SIMOX Circuit Operating Below 0.5 V", 1996 Symposium on VLSI	
	Technology, Digest of Technical Papers, Honolulu, HI,(June 11-13, 1996),96-97	
	HISAMOTO, D., et al., "A New Stacked Cell Structure for Giga-Bit DRAMs using	
	Vertical Ultra-Thin SOI (DELTA) MOSFETs", 1991 IEEE International Electron	
	Devices Meeting, Technical Digest, Washington, D.C.,(Dec. 8-11, 1991),959-961	
	HODGES, DAVID A., et al., "MOS Decoders", In: Analysis and Design of Digital	
	Integrated Circuits, 2nd Edition, Section: 9.1.3,(1988),354-357	
	HOLMAN, W. T., et al., "A Compact Low Noise Operational Amplifier for a 1.2	
	Micrometer Digital CMOS Technology", IEEE Journal of Solid-State Circuits, 30,	
	(June 1995),710-714	
	HUANG, W. L., et al., "TFSOI Complementary BiCMOS Technology for Low	
	Power Applications", <u>IEEE Transactions on Electron Devices</u> , 42, (Mar.	
·	1995),506-512	
	JUN, Y. K., et al., "The Fabrication and Electrical Properties of Modulated	
	Stacked Capacitor for Advanced DRAM Applications", IEEE Electron Device	
	<u>Letters, 13,</u> (Aug. 1992),430-432	
	JUNG, T. S., et al., "A 117-mm2 3.3-V Only 128-Mb Multilevel NAND Flash	
	Memory for Mass Storage Applications", <u>IEEE Journal of Solid-State Circuits</u> , 31,	
	(Nov. 1996),1575-1583	
	KANG, H. K., et al., "Highly Manufacturable Process Technology for Reliable 256	
	Mbit and 1Gbit DRAMs", IEEE International Electron Devices Meeting, Technical	
	Digest, San Francisco, CA,(Dec. 11-14, 1994),635-638	
1	KIM, Y. S., et al., "A Study on Pyrolysis DMEAA for Selective Deposition of	
Y	Aluminum", In: Advanced Metallization and Interconnect Systems for ULSI	
,	Applications in 1995, R.C. Ellwanger, et al., (eds.), Materials Research Society,	
L	Pittsburgh, PA,(1996),675-680	

EXAMINER	What Box	DATE CONSIDERED	6/20/2005

PTO/S9/08A(10-01)
Approved for use through 10/31/2002. OMB 651-0031
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)	<b>Application Number</b>	Unknown		
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	First Named Inventor	Noble Jr., Wendell		
	Group Art Unit	Milliona		
	Examiner Name	Little Con-		
Sheet 5 of 8	Attorney Docket No: 3	303.412US4		

100	KISHIMOTO, T., et al., "Well Structure by High-Energy Boron Implantation for	
166/	Soft-Error Reduction in Dynamic Random Access Memories (DRAMs)",	
17/1	Japanese Journal of Applied Physics, 34, (Dec. 1995),6899-6902	
	KOHYAMA, Y., et al., "Buried Bit-Line Cell for 64MB DRAMs", 1990 Symposium	•
	on VLSI Technology, Digest of Technical Papers, Honolulu, HI,(June 4-7,	
	1990),17-18	
	KOSHIDA, N., et al., "Efficient Visible Photoluminescence from Porous Silicon",	
	Japanese Journal of Applied Physics, 30, (July 1991),L1221- L1223	
	KUGE, S., et al., "SOI-DRAM Circuit Technologies for Low Power High Speed	
	Multigiga Scale Memories", IEEE Journal of Solid-State Circuits, 31(4), (April	
	1996),pp. 586-591	
	LANTZ, II, L., "Soft Errors Induced By Alpha Particles", IEEE Transactions on	
	Reliability, 45, (June 1996),174-179	
	LEHMANN, V., "The Physics of Macropore Formation in Low Doped n-Type	
	Silicon", Journal of the Electrochemical Society, 140(10), (Oct. 1993),2836-2843	
	LU, N., et al., "The SPT Cell A New Substrate-Plate Trench Cell for DRAMs",	
	1985 IEEE International Electron Devices Meeting, Technical Digest,	
1 1	Washington, D.C.,(Dec. 1-4, 1985),771-772	
	MACSWEENEY, D., et al., "Modelling of Lateral Bipolar Devices in a CMOS	
	Process", IEEE Bipolar Circuits and Technology Meeting, Minneapolis, MN, (Sep.	
	1996),27-30	1
	MAEDA, S., et al., "A Vertical Phi-Shape Transistor (VPhiT) Cell for 1 Gbit	
	DRAM and Beyond", 1994 Symposium of VLSI Technology, Digest of Technical	1
	Papers, Honolulu, HI,(June 7-9, 1994),133-134	
	MAEDA, S., et al., "Impact of a Vertical Phi-Shape Transistor (VPhiT) Cell for 1	
	Gbit DRAM and Beyond", IEEE Transactions on Electron Devices, 42, (Dec.	]
	1995),2117-2123	l
	MALAVIYA, S., IBM TBD, 15, (July 1972),p. 42	
	NITAYAMA, A., et al., "High Speed and Compact CMOS Circuits with Multipillar	
	Surrounding Gate Transistors", IEEE Transactions on Electron Devices, 36,	
	(Nov. 1989),2605-2606	
	OHNO, Y., et al., "Estimation of the Charge Collection for the Soft-Error	
	Immunity by the 3D-Device Simulation and the Quantitative Investigation",	1
	Simulation of Semiconductor Devices and Processes, 6, (Sep. 1995),302-305	
	OOWAKI, Y., et al., "New alpha-Particle Induced Soft Error Mechanism in a	
	Three Dimensional Capacitor Cell", IEICE Transactions on Electronics, 78-C.	
	(July 1995),845-851	
	OSHIDA, S., et al., "Minority Carrier Collection in 256 M-bit DRAM Cell on	
	Incidence of Alpha-Particle Analyzed by Three-Dimensional Device Simulation",	
	IEICE Transactions on Electronics, 76-C, (Nov. 1993),1604-1610	
	OZAKI, T., et al., "A Surrounding Isolation-Merged Plate Electrode (SIMPLE)	
	Cell with Checkered Layout for 256Mbit DRAMs and Beyond", 1991 IEEE	ŀ
` <b>*</b>	International Electron Devices Meeting, Washington, D.C., (Dec. 8-11,	
	1991),469-472	1

EXAMINER	Total Ihor	DATE CONSIDERED	6/20/2005

Substitute for form 1449A/PTO	US Present a Triedenant Office U.S. DEPARTMENT OF COMMERC Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMS control number Complete if Known			
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(Use as many sheets as necessary)	Filing Date	Even Date Herewith		
	First Named Inventor	Noble Jr., Wendell		
	Group Art Unit	Milder		
	Examiner Name	MANAGEN		
Sheet 6 of 8	Attorney Docket No: 3	303.412US4		

KBD	PARKE, S. A., et al., "A High-Performance Lateral Bipolar Transistor Fabricated on SIMOX", IEEE Electron Device Letters, 14, (Jan. 1993),33-35	
	PEIN, H., et al., "A 3-D Sidewall Flash EPROM Cell and Memory Array", IEEE	
	Transactions on Electron Devices, 40, (Nov. 1993),2126-2127	
	PEIN, H., et al., "Performance of the 3-D PENCIL Flash EPROM Cell and	
1 1 1	Memory Array", IEEE Transactions on Electron Devices, 42, (November,	
	1995),1982-1991	
	PEIN, H. B., et al., "Performance of the 3-D Sidewall Flash EPROM Cell", IEEE	
	International Electron Devices Meeting, Technical Digest, (1993),11-14	
	RAMO, S., et al., Fields and Waves in Communication Electronics, Third	
	Edition, John Wiley & Sons, Inc.,(1994),pp. 428-433	
1 1 1	RAO, K. V., et al., "Trench Capacitor Design Issues in VLSI DRAM Cells", 1986	
	IEEE International Electron Devices Meeting, Technical Digest, Los Angeles,	
	CA,(Dec. 7-10, 1986),140-143	
	RHYNE, In: Fundamentals of Digital Systems Design, Prentice Hall, New	
	Jersey,(1973),pg. 70-71	
	RICHARDSON, W. F., et al., "A Trench Transistor Cross-Point DRAM Cell",	
	IEEE International Electron Devices Meeting, Washington, D.C.,(Dec. 1-4,	
	1985),714-717	
	SAGARA, K., et al., "A 0.72 micro-meter2 Recessed STC (RSTC) Technology	
	for 256Mbit DRAMs using Quarter-Micron Phase-Shift Lithography", 1992	
	Symposium on VLSI Technology, Digest of Technical Papers, Seattle, WA,(June	
	2-4, 1992),10-11	
1	SAITO, M., et al., "Technique for Controlling Effective Vth in Multi-Gbit DRAM	
1 1 1	Sense Amplifier", 1996 Symposium on VLSI Circuits, Digest of Technical	
	Papers, Honolulu, HI,(June 13-15, 1996),106-107	
1 1 1	SHAH, A. H., et al., "A 4-Mbit DRAM with Trench-Transistor Cell", IEEE Journal	
ļ	of Solid-State Circuits, SC-21, (Oct. 1986),618-625	
	SHAH, A. H., et al., "A 4Mb DRAM with Cross-Point Trench Transistor Cell",	
1 1 1	1986 IEEE International Solid-State Circuits Conference, Digest of Technical	
	<u>Papers,</u> (Feb. 21, 1986),268-269	
	SHERONY, M. J., et al., "Reduction of Threshold Voltage Sensitivity in SOI	
	MOSFET's", IEEE Electron Device Letters, 16, (Mar. 1995),100-102	
	SHIMOMURA, K., et al., "A 1V 46ns 16Mb SOI-DRAM with Body Control	
] ].	Technique", 1997 IEEE International Solid-State Circuits Conference, Digest of	
<del></del>	<u>Technical Papers</u> , (Feb. 6, 1997),68-69	
	STELLWAG, T. B., et al., "A Vertically-Integrated GaAs Bipolar DRAM Cell",	
	IEEE Transactions on Electron Devices, 38, (Dec. 1991),2704-2705	
	SU, D. K., et al., "Experimental Results and Modeling Techniques for Substrate	
	Noise in Mixed-Signal Integrated Circuits", <u>IEEE Journal of Solid-State Circuits</u> ,	
<del></del>	28(4), (Apr. 1993),420-430	
4/	SUMA, K., et al., "An SOI-DRAM with Wide Operating Voltage Range by	
<b>T</b>	CMOS/SIMOX Technology", IEEE Journal of Solid-State Circuits, 29(11),	
L	(November 1994),pp. 1323-1329	

EXAMINER	Manthan DATE CONSIDERE		6/20/2005	
EXAMINER: Initial If reference	Substitute Discourre Statement Form e considered, whether or not citation is in conformatics with MPEP 809, Draw line through citat applicant, i Applicant's unigoto citation designation number (optional) 2 Applicant is to place	tion if not in conformance and not considered. Include con	by of this form with next communication to eached	

PTO/SB/05A(10.01)
Approved for use through 10/31/2002, OMB 651-0031
US Prism4 Trademit Office: US. DEPARTMENT OF COMMERCE

Substitute for form 1449A/PTO	Complete d' Known			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	<b>Application Number</b>	Unknown		
(Use as many sheets as necessary)	Filing Date	Even Date Herewith Noble Jr., Wendell		
	First Named Inventor			
	Group Art Unit	# Actions		
	Examiner Name	HARMON		
Sheet 7 of 8	Attorney Docket No: 3	303.412US4		

	SUNOUCHI, K., et al., "A Surrounding Gate Transistor (SGT) Cell for	
487	64/256Mbit DRAMs", 1989 IEEE International Electron Devices Meeting.	
14K	Technical Digest, Washington, D.C., (Dec. 3-6, 1989), 23-26	
	SUNOUCHI, K., et al., "Process Integration for 64M DRAM Using an	
	Asymmetrical Stacked Trench Capacitor (AST) Cell", 1990 IEEE International	
1.	Electron Devices Meeting, San Francisco, CA,(Dec. 9-12, 1990),647-650	
	TAKAI, M., et al., "Direct Measurement and Improvement of Local Soft Error	
	Susceptibility in Dynamic Random Access Memories", Nuclear Instruments &	
	Methods in Physics Research, B-99, (Nov. 7-10, 1994),562-565	
	TAKATO, H., et al., "High Performance CMOS Surrounding Gate Transistor	
	(SGT) for Ultra High Density LSIs", IEEE International Electron Devices Meeting,	
	Technical Digest, (1988),222-225	
	TAKATO, H., et al., "Impact of Surrounding Gate Transistor (SGT) for Ultra-High	
	Density LSI's", IEEE Transactions on Electron Devices, 38, (Mar. 1991),573-578	
	TANABE, N., et al., "A Ferroelectric Capacitor Over Bit-Line (F-COB) Cell for	
	High Density Nonvolatile Ferroelectric Memories", 1995 Symposium on VLSI	
	Technology, Digest of Technical Papers, Kyoto, Japan, (June 6-8, 1995), 123-124	
	TERAUCHI, M., "A Surrounding Gate Transistor (SGT) Gain Cell for Ultra High	
	Density DRAMs", 1993 Symposium on VLSI Technology, Digest of Technical	
	Papers, Kyoto, Japan,(1993),21-22	
	TSUI, P. G., et al., "A Versatile Half-Micron Complementary BiCMOS	
	Technology for Microprocessor-Based Smart Power Applications", IEEE	
1	Transactions on Electron Devices, 42, (Mar. 1995),564-570	
	VERDONCKT-VANDEBROEK, S., et al., "High-Gain Lateral Bipolar Action in a	-
	MOSFET Structure", IEEE Transactions on Electron Devices 38, (Nov.	
	1991),2487-2496	
	WANG, N., Digital MOS Integrated Circuits, Prentice Hall, Inc., Englewood	
]	Cliffs, NJ,(1989),p. 328-333	
	WANG, P. W., et al., "Excellent Emission Characteristics of Tunneling Oxides	
	Formed Using Ultrathin Silicon Films for Flash Memory Devices", <u>Japanese</u>	
	Journal of Applied Physics, 35, (June 1996),3369-3373	
	WATANABE, H., et al., "A New Cylindrical Capacitor Using Hemispherical	
	Grained Si (HSG-Si) for 256Mb DRAMs", IEEE International Electron Devices	
	Meeting, Technical Digest, San Francisco, CA,(Dec. 13-16, 1992),259-262	
	WATANABE, S., et al., "A Novel Circuit Technology with Surrounding Gate	
	Transistors (SGT's) for Ultra High Density DRAM's", IEEE Journal of Solid-State	
	Circuits, 30, (Sep. 1995),960-971	
	WATANABE, H., "A Novel Stacked Capacitor with Porous-Si Electrodes for	
	High Density DRAMs", 1993 Symposium on VLSI Technology, Digest of	
	Technical Papers, Kyoto, Japan, (1993), 17-18	
	WATANABE, H., et al., "An Advanced Fabrication Technology of Hemispherical	
₩	Grained (HSG) Poly-Si for High Capacitance Storage Electrodes", Extended	
T	Abstracts of the 1991 International Conference on Solid State Devices and	
	Materials, Yokohama, Japan, (1991), 478-480	
	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	

Whenh Thon DATE CONSIDERED 6/2	20/2005
Whank Thon DATE CONSIDERED	6/2

PTO/SB05A(10-01)
Approved for use through 10/31/2002, OMB 851-0031
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Substitute for form 1449APTO	Complete if Known				
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)	Application Number	Unknown			
	Filing Date	Even Date Herewith			
	First Named Inventor	Noble Jr., Wendell			
	Group Art Unit	WASON .			
	Examiner Name				
Sheet 8 of 8	Attorney Docket No: 303.412US4				

MBD	WATANABE, H., et al., "Device Application and Structure Observation for Hemispherical-Grained Si", J. Appl. Phys., 71, (Apr. 1992),3538-3543	
	WATANABE, H., et al., "Hemispherical Grained Silicon (HSG-Si) Formation on In-Situ Phosphorous Doped Amorphous-Si Using the Seeding Method", Extended Abstracts of the 1992 International Conference on Solid State Devices and Materials, Tsukuba, Japan,(1992),422-424	
	WOLF, STANLEY, "Isolation Technolgies for Intergrated Circuits", <u>Silicon</u> Processing for the NLSI Era Vol. 2 Process Integration, (1990),66-78	
	YAMADA, T., et al., "A New Cell Structure with a Spread Source/Drain (SSD) MOSFET and a Cylindrical Capacitor for 64-Mb DRAM's", IEEE Transactions on Electron Devices, 38, (Nov. 1991),2481-2486	
	YAMADA, T., et al., "Spread Source/Drain (SSD) MOSFET Using Selective Silicon Growth for 64Mbit DRAMs", 1989 IEEE International Electron Devices Meeting, Technical Digest, Washington, D.C., (Dec. 3-6, 1989),35-38	
. 1	YOSHIKAWA, K., "Impact of Cell Threshold Voltage Distribution in the Array of Flash Memories on Scaled and Multilevel Flash Cell Design", 1996 Symposium on VLSI Technology, Digest of Technical Papers, Honolulu, HI,(June 11-13, 1996),240-241	

EXAMINER / Mark / Prony DATE CONSIDERED 6/20/2005

PTO/SE/08A(10-01)
Approved for use through 10/31/2002, OMB 651-0031
start & Tredemark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449A/PTO
INFORMATION DISCLOSURE Complete If Known **Application Number** 10/738,449 ATEMENT BY APPLICANT December 16, 2003 **Filing Date** as necessary) Noble Jr., Wendell **First Named Inventor** 2822 JUL 0 7 2004 **Group Art Unit** William K. DUONG **Examiner Name** Attorney Docket No: 303.412US4

	US PATENT DOCUMENTS						
Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	Filing Date If Appropriate	
KBD	US-4,740,826	04/26/1988	Chatterjee, P. K.	357	42	09/25/1985	
	US-4,845,537	07/04/1989	Nishimura, T., et al.	357	23.4	12/01/1987	
	US-5,006,909	04/09/1991	Kosa, Y.	357	23.6	10/30/1989	
	US-5,010,386	04/23/1991	Groover III, R.	357	42	12/26/1989	
	US-5,072,269	12/10/1991	Hieda, K.	357	23.6	03/15/1989	
	US-5,087,581	02/11/1992	Rodder, M. S.	437	41	10/31/1990	
	US-5,140,388	08/18/1992	Bartelink, D. J.	357	23.4	03/22/1991	
	US-5,177,028	01/05/1993	Manning, M.	437	41	10/22/1991	
	US-5,177,576	01/05/1993	Kimura, S., et al.	257	71	05/06/1991	
	US-5,208,657	05/04/1993	Chatterjee, P. K., et al.	257	302	06/22/1991	
	US-5,308,782	05/03/1994	Mazure, C. A., et al.	437	52	10/26/1992	
	US-5,316,962	05/31/1994	Matsuo, N., et al.	437	52	08/06/1992	
	US-5,378,914	01/03/1995	Ohzu, H., et al.	257	369	12/24/1992	
	US-5,379,255	01/03/1995	Shah, P. L.	365	185	12/14/1992	
	US-5,385,853	01/31/1995	Mohammad, S. N.	437	41	12/02/1992	
1	US-5,414,288	05/09/1995	Fitch, J. T., et al.	257	328	02/16/1994	
	US-5,416,350	05/16/1995	Watanabe, S.	257	330	03/15/1994	
	US-5,416,736	05/16/1995	Kosa, Y., et al.	365	174	07/25/1994	
	US-5,504,357	04/02/1996	Kim, J. S., et al.	257	306	06/30/1994	
	US-5,519,236	05/21/1996	Ozaki, T.	257	302	06/27/1994	
	US-5,528,062	06/18/1996	Hsieh, C., et al.	257	298	06/17/1992	
	US-5,574,299	11/12/1996	Kim, H.	257	296	06/29/1995	
	US-5,576,238	11/19/1996	Fu, C.	437	52	06/15/1995	
	US-5,581,101	12/03/1996	Ning, T. H., et al.	257	347	01/03/1995	
	US-5,612,559	03/18/1997	Park, K., et al.	257	302	08/30/1994	
	US-5,627,390	05/06/1997	Maeda, S., et al.	257	302	05/16/1996	
	US-5,637,898	06/10/1997	Baliga, B. J.	257	330	12/22/1995	
	US-5,707,885	01/13/1998	Lim, B.	437	52	05/24/1996	
<del>-  </del>	US-5,719,409	02/17/1998	Singh, R., et al.	257	77	06/06/1996	
	US-5,780,888	07/14/1998	Maeda, S., et al.	257	302	12/02/1996	
	US-5,864,158	01/26/1999	Liu, Y. W., et al.	257	330	04/04/1997	
	US-5,907,170	05/25/1999	Forbes, L., et al.	257	296	10/06/1997	
	US-5,920,088	07/06/1999	Augusto, C.	257	192	06/17/1996	
	US-5,936,274	08/10/1999	Forbes, L., et al.	257	315	07/08/1997	
	US-5,973,352	10/26/1999	Noble, W. P.	257	315	08/20/1997	
	US-5,973,356	10/26/1999	Noble, W. P., et al.	257	319	07/08/1997	
	US-5,991,225	11/23/1999	Forbes, L., et al.	365	230.06	02/27/1998	
1.	US-6,040,210	03/21/2000	Burns Jr., S. M., et al.	438	238	01/26/1998	
<b>V</b>	US-6,040,218	03/21/2000	Lam, C. H.	438	259	09/13/1999	

EXAMINER Johan / June

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DATE CONSIDERED 6/

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PTO/SB/084(10-01)
Approved for use through 10/31/2002, OMB 651-0031
Palant & Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449A/PTO Complete If Known INFORMATION DISCLOSURE **Application Number** 10/738,449 STATEMENT BY APPLICANTP E December 16, 2003 Filing Date First Named Inventor Noble Jr., Wendell JUL 0 7 2004 **Group Art Unit** 2820 **Examiner Name** Biolicano Attorney Docket No: 303.412US4 Sheet 2 of 2

KBD	US-6,043,527	03/28/2000	Forbes, L.	257	296	04/14/1998
	US-6,066,869	05/23/2000	Noble, W. P., et al.	257	296	10/06/1997
	US-6,072,209	06/06/2000	Noble, W. P., et al.	257	296	07/08/1997
	US-6,100,123	08/08/2000	Bracchitta, J. A., et al.	438	199	01/20/1998
	US-6,134,175	10/17/2000	Forbes, L., et al.	365	230.06	08/04/1998
	US-6,143,636	11/07/2000	Forbes, L., et al.	438	587	08/20/1998
	US-6,150,687	11/21/2000	Noble, W. P., et al.	257	302	07/08/1997
	US-6,153,468	11/28/2000	Forbes, L., et al.	438	257	05/17/1999
	US-6,156,604	12/05/2000	Forbes, L., et al.	438	241	08/31/1998
	US-6,156,607	12/05/2000	Noble, W. P., et al.	438	244	08/24/1998
	US-6,165,836	12/26/2000	Forbes, L., et al.	438	243	08/24/1998
	US-6,242,775	06/05/2001	Noble, W. P.	257	330	02/24/1998
	US-6,275,071	08/14/2002	Ye, Y., et al.	326	98	12/29/1999
	US-6,399,979	06/04/2002	Noble, W. P., et al.	257	302	06/16/2000
	US-6,498,065	12/24/2002	Forbes, L., et al.	438	259	08/30/2000
Y	US-6,528,837	03/04/2003	Forbes, L., et al.	257	302	10/06/1997

	FOREIGN PATENT DOCUMENTS								
Examiner Initials*									
KBD	EP-0198590	10/22/1986	Wada, M.	H01L	27/10	` `			
	JP-11-135757	05/21/1999	Goebel, B., et al.	H01L	27/108				

OTHER DOCUMENTS NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
KBD		SUN, J., "CMOS Technology for 1.8V and Beyond", <u>Int'l Symp. on VLSI</u> <u>Technology, Systems and Applications: Digest of Technical Papers,</u> (1997),293-297	

EXAMINER Johann Duony DATE CONSIDERED 6/20/2005